

MARINE SAFETY MANUAL

- 3.E.2.h (4) (cont'd) the piping between the pump and the heat exchanger may be used in lieu of a device installed directly on the high-pressure side of the heat exchanger.

i. Authorized Inspectors And Holders of ASME Code Symbol Stamps.

- (1) Introduction. To assure integrity in the manufacture, installation, and testing of pressure vessels, independent third party inspection is required. Because of the special interests involved, manufacturers and users are not solely relied upon to ensure compliance with Coast Guard or ASME Code requirements. Coast Guard personnel inspect nearly all pressure vessels installed aboard certificated ships. However, some pressure vessels are exempt from Coast Guard plan review and shop inspection by 46 CFR 54 based on the presence of an ASME Code Symbol Stamp on the vessel. In these cases, the Coast Guard accepts the services of an "authorized inspector" (AI) in lieu of shop inspection by Coast Guard personnel (see paragraph UG-91 of Section VIII, Division 1 concerning AI's). In accepting pressure vessels with an official "U" or "UM" stamp, as set forth in Section VIII, Division 1, the Coast Guard is assured that certain quality control procedures are being followed by the manufacturer to provide compliance with code requirements. To receive a Certificate of Authorization to use a "U" or "UM" stamp, a manufacturer must have and demonstrate a quality control system established to meet code requirements.

(2) National Board of Boiler and Pressure Vessel Inspectors.

- (a) Introduction. With headquarters in Columbus, Ohio, the National Board (NB) was formed to promote safety and uniformity in construction, installation, and inspection of boilers and pressure vessels, and to establish reciprocity between the United States and Canada. All Canadian provinces and most U.S. states require boilers and pressure vessels to be inspected during fabrication by an inspector holding a NB commission, and then to be stamped with a NB standard number. Qualified authorized manufacturers must be registered with the NB, and a data form for each vessel is maintained on file by the NB. To receive an NB commission, an inspector must meet minimum requirements of experience and education, pass a written examination, and be employed by a jurisdiction or an authorized inspection agency (such as a company that insures boilers and pressure vessels). The inspector may be employed by the manufacturer only if the products will be used exclusively by that company.
- (b) Activities. Companies applying for an ASME Code Symbol Stamp are thoroughly investigated by the jurisdiction or by the NB before the company is authorized to manufacture ASME Code vessels. The AI assigned to that shop continually audits compliance of that shop with code requirements. Code requirements for manufacturers are contained in paragraph 13-2 of Section VIII, Division 1 of the ASME Code. The NB also administers the capacity certification of safety valves and safety relief valves constructed in accordance with ASME Code requirements. Since Coast Guard requirements are primarily